

a WOW Lab

**BLUEPRINT**

The Maglev Train

## Shopping List

The list is divided into consumable and reusable items. Quantities listed assume that one train will be made and the activity will be run once. The listed initial cost assumes that the activity has never been performed before and that all of the materials must be purchased. The legend below provides details of where the materials can be found:

A = Arts and Crafts Store  
D = Dollar Store  
E = Educational Supplier

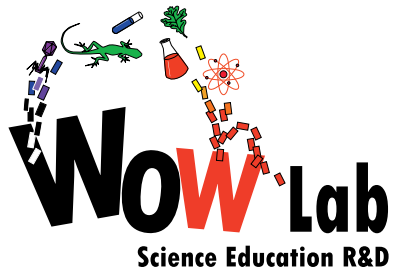
G = Grocery Store  
H = Hardware Store  
O = Online

P = Pharmacy  
S = Specialty Store  
U = University

<b>CONSUMABLE ITEMS</b>			
Item	Amount Required	Purchase Code	Total Cost
liquid nitrogen	500 ml	E/U	\$2.00
<b>COST OF CONSUMABLE ITEMS:</b>			<b>\$2.00</b>

<b>REUSABLE ITEMS</b>			
Item	Amount Required	Purchase Code	Total Cost
3/8 in. cube rare-earth magnets (NIB)	650 - 850	O	\$550.00 - \$650.00
~2 cm disks of BSCCO superconductor	3	O	\$135.00
3 - 4 in. model train body	1	A	\$5.00
3 ft. x 4 ft. sheet of metal	1	H	\$50.00
4 in. x 2 in. x 1 in. piece of Styrofoam	1	—	free
Styrofoam container (large enough to fit the model train)	1	—	free
<b>COST OF REUSABLE ITEMS:</b>			<b>\$740.00 - \$840.00</b>

<b>INITIAL COST: \$742.00 - \$842.00</b>
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## Tools

- wooden ruler
- Dremel rotary tool or craft knife
- hammer
- flat head screwdriver
- Dewar flask
- permanent marker
- plastic tweezers